UNITED STATES DISTRICT COURT EASTERN DISTRICT OF MICHIGAN SOUTHERN DIVISION

ROBOTIC VISION TECHNOLOGIES

Case No. 11-12909

LLC, and

FREDERICK WEIDINGER,

Hon. Victoria A. Roberts

Plaintiffs,

Magistrate Judge Laurie J. Michelson

-V-

ADIL SHAFI,

Defendant.

PLAINTIFFS' SCHEDULING CONFERENCE STATEMENT

Scheduling Conference: January 8, 2014 at 9:30 a.m.

I. SUMMARY OF PLAINTIFFS' CLAIMS

A. The 2009 Case.

On August 12, 2008, Braintech, Inc. acquired from Adil Shafi a controlling interest in two companies, SHAFI, Inc. and SHAFI Innovation, Inc., which distributed software solutions for vision-guided robotics (including the "Reliabot" product).

On November 24, 2008, Braintech terminated Shafi's employment.

At the trial of case no. 09-10454 (the "2009 Case"), the jury determined that Braintech's termination of Shafi's employment was not for good cause and

returned a verdict in Shafi's favor against Braintech, which is defunct and has no assets. The appeal period expired on December 26, 2013, and neither Braintech nor Shafi filed an appeal from the 2009 case.

B. The 2011 Case

On May 24, 2010, RVT purchased all of Braintech's assets at public auction, which included all contract rights, commercial tort claims, patent and trade secret rights, agreements, and confidential information, as well as any claims for damages by way of any past, present, or future infringement of such rights.

In Case No. 11-12909 (the "2011 Case"), Plaintiffs Robotic Vision Technologies LLC and Frederick ("Rick") Weidinger assert claims against Shafi for breach of a Non-Competition Agreement, Defamation and Unfair Competition. The entirety of the 2011 Case is predicated upon Shafi's conduct <u>after</u> the termination of his employment at Braintech.

Shafi asserted no counterclaims and has conducted no discovery.

II. PROCEDURAL POSTURE OF THE 2011 CASE

On February 14, 2013, Shafi stipulated to an order that he and his new company, Advenovation, would produce requested documents, software and source codes by February 28, 2013 (pursuant to a protective order) and then make himself available for deposition. On that date, Shafi's counsel emailed responses with some but not all of the requested documents and information.

On March 12, 2013, the Court convened a status conference in both the 2009 and 2011 cases and determined to stay the 2011 case in favor of proceeding to trial on the 2009 case. At that time, the discovery cutoff in the 2011 case was set for March 31, 2013.

III. PLAINTIFFS' PROPOSAL FOR CONCLUDING THE 2011 CASE.

Weidinger and Shafi have been locked in battle for five years. At this point, RVT and Weidinger's principal concern is whether, as a component of unfair competition, Shafi and/or Advenovation have misappropriated or infringed upon RVT's vision software source codes, particularly those acquired at the auction of Braintech assets (including Reliabot).

By letter dated January 6, 2014 (attached), Plaintiffs have proposed to Shafi and his counsel an expedited process pursuant to which Plaintiffs' expert, John Martens PhD, will investigate, evaluate and determine whether source code misappropriation or infringement has occurred. The determination of that issue materially will advance the final resolution or conclusion of this case

Plaintiffs request that in setting final dates for the 2011 case the Court provide a reasonable period for completing this process, which will require coordination with and cooperation by Shafi and his counsel.

Respectfully submitted,

DICKINSON WRIGHT PLLC

By: /s/ Thomas G. McNeill
Thomas G. McNeill (P36895)
Attorneys for Plaintiffs
500 Woodward Ave, Suite 4000
Detroit, Michigan 48226
313-223-3500
tmcneill@dickinsonwright.com

Dated: January 7, 2014

I hereby certify that on January 7, 2014, I electronically filed the foregoing paper with the Clerk of the Court using the ECF system which will send notification of such filing to counsel of record.

/s/ Thomas G. McNeill
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THOMAS G. MCNEILL TMcNeill@dickinsonwright.com (313) 223-3632

Delivered via email, facsimile and US mail

January 6, 2013

T. Michael Doyle, Esq. John J. Doyle, Esq. 45 Blue Star Highway Douglas, MI 49406

Re: Robotic Vision Technologies, LLC and Frederick Weidinger v. Adil Shafi, U.S.D.C., E.D. Mich., Case No. 11-12909

Dear Messrs. Doyle,

We surmise that during the January 8, 2014 conference the Court will set deadlines for the completion of this case.

At this juncture, our principal focus is on the issue of whether Mr. Shafi and/or Advenovation has misappropriated or infringed upon the source codes for the vision technologies owned by Robotic Vision Technologies (including Reliabot). Our expert, Dr. John Martens (resume attached) will conduct that analysis.

We wish to conduct this investigation and analysis on an expedited basis. We would like you and your client to cooperate, and assist, in expediting the investigatory process outlined below.

First, I have appended a copy of the First Amended Responses to Plaintiffs' written discovery requests, dated February 28, 2013, which you transmitted to us by email. We have discovered that attachment nos. 3, 4 and 5 did not come through that electronic delivery. Would you please download that material on a flash drive (or similar storage vehicle) and overnight those to us.

Second, Dr. Martens would like to inspect in its native environment (at customer locations) a Shafi/Advenovation vision technology software product sold and installed in each of these two time frames: (1) November 25, 2008 and June 30, 2009; and (2) December 1, 2012 and November 30, 2013. For each of these two time frames, please provide a list identifying all of the vision software customers who purchased in each of the two time periods, by company name and the address(es) of the installation location(s).

If you and I are working in a cooperative manner, our firm and our clients will refrain from contacting any of the customers (directly or indirectly) concerning an inspection or any

DICKINSON WRIGHT PLLC

T. Michael Doyle, Esq. John J. Doyle January 6, 2013 Page 2

aspect of this case. Instead, our team will select one customer from each time frame and then you and I together will work on a "cover story" that will allow Dr. Martens access to the software product on-site without raising customer suspicion concerning Mr. Shafi or Advenovation. In a cooperative mode, you and Mr. Shafi can handle the communication with the two customers for setting up the inspection. Otherwise, we will subpoen a on-site access.

Third, for the software products to be inspected at the customer locations, we request that Defendants produce the following materials:

- The source code for the product in its native, electronic format with all comments, etc. in place (saved as ASCII-readable where possible);
- 2. The name and type of compiler(s) used to compile and link the source code and the settings for the compilers;
- 3. Supporting files including project files;
- 4. All available information related to changes and product evolution, including change logs;
- 5. All available setup and users manuals for the software/system;
- 6. All available software specification, functional specification, and/or description documents; and
- 7. Any programming implementation documentation that would include, for example, specific details of the implementation of the algorithms.

While we believe that most if not all of these materials are covered by previous discovery requests, if in good faith you believe otherwise please accept this notice that we designate the foregoing as discovery requests made pursuant to Fed.R.Civ.P. 34. In all events, we would hope that you would expedite providing these materials to us.

To advance and expedite our investigation, we agree to maintain the results of the on-site inspection and the materials produced in response hereto as "attorneys and expert eyes only" per the protective order, unless otherwise mutually agreed or ordered by the Court.

I would like to discuss the forgoing with you tomorrow (January 7) so that together we may discuss this approach with the Court at the conference on January 8.

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DICKINSON WRIGHT PLLC

T. Michael Doyle, Esq. John J. Doyle January 6, 2013 Page 3

Many thanks for your kind attention.

With best regards,

/s/

Thomas G. McNeill

UNITED STATES DISTRICT COURT EASTERN DISTRICT OF MICHIGAN SOUTHERN DIVISION

ROBOTIC VISION TECHNOLOGIES, LLC; a Nevada limited liability company; and FREDERICK WEIDINGER, an individual, Case No. 2:11-cv-12909

Plaintiffs,

Honorable Victoria A. Roberts

Vs.

ADIL SHAFI,

Defendant.

DEFENDANT'S AND
ADVENOVATION, INC.'S FIRST
AMENDED RESPONSE TO
PLAINTIFFS' FIRST REQUEST
FOR PRODUCTION OF
DOCUMENTS AND THINGS

Michelle L. Alamo (P60684) Thomas G. McNeill (P36895) DICKINSON WRIGHT Attorney for Plaintiffs 500 Woodward Avenue, Suite 4000 Detroit, Michigan 48226-3425 (313) 223-3500 T. Michael Doyle (P12931)
John J. Doyle (P46865)
DOYLE & MALINZAK, P.C.
Attorney for Defendant
45 Blue Star Highway
Douglas, Michigan 49406
(269) 857-3111

NOW COMES Defendant, Adil Shafi, by and through his attorney, John J. Doyle and for his amended response to Plaintiff Robotic Vision Technologies, LLC and Frederick Weidinger's First Request for Production of Documents and Things, states as follows:

1. All written employment, independent contractor, agency, consultant, investor, director, officer, shareholder, partnership, joint venture, ownership, or other agreements between Advenovation, Inc. ("Advenovation") and Adil Shafi, David Dechow, or Aptura Machine Vision Systems ("Aptura").

RESPONSE: See attachment No. 1.

2. All written employment, independent contractor, agency, consultant, investor, director, officer, shareholder, partnership, joint venture, ownership, or other agreements between Advenovation and Paul Tomasai, Douglas or Karen Abramson, Calvin or Elise White, or Bruce or Patricia Rukkila related to Advenovation and/or the design, development, sale, licensing or distribution of Machine Vision and/or Vision guided Robotics ("VGR") related software, systems, support, coding, consulting, or other services.

RESPONSE: See attachment No. 2. These documents are designated "Confidential".

3. All documents referring or relating to Advenovation's design or development of Machine Vision and/or VGR-related systems, software, coding, consulting, or other services since June , 2008, as provided.

RESPONSE: See attachment No. 3. These documents are designated "Confidential: Attorneys' and Experts' Eyes Only".

4. All contracts, agreements, licenses, or arrangements of any kind relative to the design, development, production, supply, sale, or licensing of Machine Vision and/or VGR-related systems, software, support, coding, or consulting, or other services by Advenovation, as provided.

RESPONSE: See attachment No. 4. These documents are designated "Confidential: Attorneys' and Experts' Eyes Only".

5. All communications between Advenovation and David Dechow and/or Aptura related to the design, development, production, supply, sale, and/or licensing of Machine Vision and/or VGR-related systems, software, support, coding, or consulting, or other services.

RESPONSE: See attachment No. 5. These documents are designated "Confidential: Attorneys' and Experts' Eyes Only".

- 6. All documents referring or relating to contracts, agreements, licenses, or arrangements of any kind relative to the design, development, production, supply and/or sale of Machine Vision and/or VGR-related systems, software, coding, consulting, or other services between Advenovation, and any company or customer, including, but not limited to, the following companies:
 - a. Hutchinson;
 - b. H.H. Barnum;
 - c. Mark One; and
 - d. Robotechnology Center.

RESPONSE: See attachment Nos. 3, 4 and 5. These documents are designated "Confidential".

7. All purchase orders, invoices, and/or payment records for services related to the design, development, production, supply and/or sale of Machine Vision and/or VGR-related systems, software, support, coding, or consulting, or other services,

provided by Advenovation, Adil Shafi, David Dechow, and/or Aptura, to any company or customer, including, but not limited to, the following companies:

- a. Hutchinson;
- b. H.H. Barnum;
- c. Mark One; and
- d. Robotechnology Center.

RESPONSE: See attachment Nos. 3, 4, 5 and 6.

- 8. Documents sufficient to identify the scope of Machine Vision and/or VGR-related systems, software, support, coding, or consulting, or other services, provided by Advenovation, Adil Shafi, David Dechow, and/or Aptura, to any company or customer after June 2008, including, but not limited to, the following companies:
 - a. Hutchinson;
 - b. H.H. Barnum;
 - c. Mark One; and
 - d. Robotechnology Center.

RESPONSE: See attachment Nos. 3, 4, 5, 6 and 7.

- 9. All documents relating to Advenovation's attempts to promote, distribute, license, sell, or otherwise provide Machine Vision and/or VGR-related software, systems, support, coding, consulting or other services to any company or customer, including, but not limited to, the following companies:
 - a. Hutchinson;

- b. H.H. Barnum;
- c. Mark One; and
- d. Robotechnology Center;
- e. Cognex;
- f. Microscan;
- g. PDSI;
- h. Motoman;
- i. Adept Technology;
- j. NorthCoast Technical;
- k. McNaughton McKay Vision & Traceability Group;
- l. Gudel;
- m. Kuka;
- n. Matrox;
- o. Hutchinson;
- p. Ford Motor Company; and
- q. ABB.

RESPONSE: See attachment Nos. 3, 4, 5, 6, 7 and 8.

- 10. All written communications and online submissions made by Advenovation that mention, discuss, or otherwise make reference to Braintech, Robotic VISION Technologies, and/or Frederick Weidinger, including, but not limited to, any such communications made to the following companies:
 - a. Hutchinson;

- b. H.H. Barnum;
- c. Mark One; and
- d. Robotechnology Center;
- e. Cognex;
- f. Microscan;
- g. PDSI;
- h. Motoman;
- i. Adept Technology;
- j. NorthCoast Technical;
- k. McNaughton McKay Vision & Traceability Group;
- l. Gudel;
- m. Kuka;
- n. Matrox;
- o. Hutchinson;
- p. Ford Motor Company; and
- q. ABB.

RESPONSE: No such documents exist.

11. All advertising by Advenovation related to or promoting Machine Vision and/or VGR-related software, systems, coding, consulting, or other services since June 1, 2008.

RESPONSE: See attachment No. 11. Said advertising can be found at www.advenovation.com and www.robotics.com.

12. Documents sufficient to identify all wages, commissions, or other payments for services made by Advenovation to Adil Shafi, David Dechow, Aptura, or any other third-party related to the design and development of Machine Vision and/or VGR-related systems, software, coding, consulting, or other services.

RESPONSE: See attachment Nos. 3, 4, 5, 6, 7 and 8.

- 13. A copy of all software and related source code, including any related auxiliary files, in both compiled and uncompiled form, designed, developed, produced, supplied, offered for sale, licensed, and/or sold by Advenovation to any customer or company since Jun 1, 2008, including, but not limited to, the following companies:
 - a. Hutchinson;
 - b. H.H. Barnum;
 - c. Mark One; and
 - d. Robotechnology Center.

RESPONSE: See attachment Nos. 1, 2, 3, 4, 5, 6, 7 and 8.

14. Any documents in Advenovation's possession documenting, discussing, related to, or otherwise referencing the Braintech software or source code.

RESPONSE: No such documents exist.

15. Documents sufficient to identify the general directory structure of the file systems for the Machine Vision and/or VGR-related software and/or source code

designed, developed, or offered for sale by Advenovation, including, but not limited to, documents sufficient to identify:

- a. the general structure of how the source code is stored;
- b. how many versions exist;
- c. what software package(s) and/or language(s), and which versions of such were used to create the source codes; and
- d. what, if any, auxiliary files are required to fully evaluate the source codes.

RESPONSE: See attachment Nos. 1, 2, 3, 4, 5, 6, 7 and 8.

16. Any user, programming, support, technical, or other manuals related to the Machine Vision and/or VGR-related software designed, developed, licensed, sold, or offered for sale by Advenovation.

RESPONSE: See attachment Nos. 1, 2, 3, 4, 5, 6, 7 and 8.

17. Documents sufficient to identify the "over 300 successful robotic installations in the manufacturing industry" referenced on Advenovation's website, including documents sufficient to identify the technical nature of the installations, companies to which the installations were sold or otherwise provided, the dates thereof, and the main contact.

RESPONSE: See attachment Nos. 1, 2, 3, 4, 5, 6, 7 and 8.

18. Documents related to Advenovation's securing of the "#1 Ranking for Bin Picking by Google.com" as referenced on Advenovation's website.

RESPONSE: No such documents exist.

Documents sufficient to identify the "16+ robot companies" and "80+ 19.

integrators" with which Defendant and/or Advenovation have an association, as

referenced on Advenovation's website, including, but not limited to, Defendant and/or

Advenovation's contact at each company.

RESPONSE: No such documents exist.

Documents sufficient to identify the "more than 300 solutions for various 20.

vertical applications such as auto racking, bin picking, 3D measurement, inspection,

flexible feeding, path following, machine tending, etc.," referenced on Advenovation's

website, including documents sufficient to identify the technical nature of the solutions,

company to which the solutions were provided, the dates thereof, and the main contact.

RESPONSE: No such documents exist.

21. All communications between Defendant, Advenovation, David Dechow,

and/or Aptura since June 2008 related to, referencing, discussing, or otherwise

mentioning, the Reliabot software or source code.

RESPONSE: See attachment Nos. 1, 2, 3, 4, 5, 6, 7 and 8.

Any Reliabot software or source code in Advenovation's possession, 22.

including any software or source code that has been modified.

RESPONSE: There is none.

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23. Any Braintech software or source code in Advenovation's possession, including any software or source code that has been modified.

RESPONSE: There is none.

24. A copy of all software and source code, including any related auxiliary files, in both compiled and uncompiled form designed, developed, produced, supplied, offered for sale, licensed, and/or sold by Advenovation, Shafi, Dechow, Aptura, or any independent contracting party.

RESPONSE: See attachment Nos. 1, 2, 3, 4, 5, 6, 7 and 8.

25. A copy of all Advenovation business plans.

RESPONSE: See attachment Nos. 1, 2, 3, 4, 5, 6, 7 and 8.

26. A copy of Advenovation's tax returns for 2008, 2009, 2010, and 2011, as well as all loan and debt documentation from any and all sources.

RESPONSE: See attachment No. 26. These documents are designated "Confidential".

A copy of Advenovation's financial statements for 2008, 2009, 2010, and 2011.

RESPONSE: See attachment No. 27. These documents are designated "Confidential".

28. A copy of any and all discussions, conversations, agreements, or documents relating to the history and outcome of Advenovation securing the Military \$1.9 million earmark for Remote Sensing for Military Robots. Also, provide a detailed description of the technology Advenovation provides for such application.

RESPONSE: None. The contract was not secured.

29. A copy of all customer purchase orders secured by Advenovation, Aptura, Shafi individually, or Dechow individually, in 2008, 2009, 2010, 2011, and 2012.

RESPONSE: See attachment Nos. 1, 2, 3, 4, 5, 6, 7 and 8.

30. A copy of all vision system hardware purchase orders made by Advenovation, Aptura, Shafi individually, or Dechow individually in 2008, 2009, 2010, 2011 and 2012.

RESPONSE: See attachment No. 30. These documents are designated "Confidential".

31. A copy of all technical reviews performed on Reliabot software and technology from inception to the current.

RESPONSE: No such documents exist.

32. Provide a list of all current and former employees of Advenovation.

RESPONSE: Adil Shafi was the only employee in 2009.

33. Provide a schedule of Revenue/Sales for Advenovation from inception to current.

RESPONSE: None.

34. Provide a schedule of costs for Advenovation from inception to current.

RESPONSE: Unknown.

35. Provide a current balance sheet for Advenovation.

RESPONSE: None.

36. Provide a cash flow statement for Advenovation from inception to current.

RESPONSE: None.

37. Provide a schedule of Revenue/Sales for Aptura from inception to current.

RESPONSE: These documents are not in my possession or control.

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Dated: February ____, 2013

DOYLE & MALINZAK, P.C.

Attorney for Defendant

Ву:

T. Michael Døyle (P12931) John J. Döyle (P46865) 45 Blue Star Highway Douglas, Michigan 49406

(269) 857-3111

Dated: February 38 2013

Adil Shafi

Dated: February 28, 2013

Adil Shafi, President Advenovation, Inc.



Exponent 525 W. Monroe Street Suite 1030 Chicago, H. 60661

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John D. Martens, Ph.D., P.E., CFEI Principal Engineer and Office Director

Professional Profile

Dr. John D. Martens is a Principal Engineer in Exponent's Electrical Engineering and Computer Science practice and the Director of the Chicago-area offices. He specializes in control systems and software, microprocessor-based and computer systems, circuit design and analysis, electronic components failure analysis, automotive control systems, electronic stability control systems, programmable logic controllers (PLCs) and process control (including DCS and SCADA analysis), robotics and automation, computer vision, consumer products design and failure analysis, and intellectual property issues.

Prior to joining Exponent, Dr. Martens managed the embedded control systems group at Delphi Corporation, a leading global supplier of mobile electronics and transportation systems, and led an R & D team from development to commercialization of an active rear steering system for improved vehicle performance. Dr. Martens has experience developing and testing electronic stability control systems. Dr. Martens' robotic experience includes developing methods and algorithms for the automatic control of a stair-climbing mobile robot. He has experience programming PLCs and analyzing process control systems.

As a member of Delphi's Innovation Center, Dr. Martens actively supported Delphi's Intellectual Property (IP) portfolio as an inventor (8 United States patents and 1 European patent) and provided analyses related to patent prosecution, validity, and infringement questions as well as prior art research and enablement. Dr. Martens has continued his active involvement in IP matters at Exponent. His most recent IP activity has involved products such as software-controlled systems including computer hard drive control and fluid delivery systems.

Dr. Martens' facilities management experience at Delphi includes equipment specification, procurement, installation, and maintenance. His facilities experience also includes the maintenance of a mechatronics research and development laboratory containing several industrial robots and control systems.

Dr. Martens is active in the field of industrial process control, including burner management and combustion control systems for industrial boilers and furnaces. He has advised his clients regarding the appropriate level of safeguards necessary for the safe operation and control of their systems, assisted them in implementing those safeguards, and audited their installations. He draws from his accident investigation experience and his knowledge of industry standards to perform process hazard analyses.

Academic Credentials and Professional Honors

M.B.A., The University of Michigan (with High Distinction), 2003
Ph.D., Electrical Engineering and Computer Science, Case Western Reserve University, 2000
M.S., Electrical Engineering and Applied Physics, Case Western Reserve University, 1993
B.S. Electrical Engineering and Applied Physics, Case Western Reserve University (summa cum laude), 1993

Tau Beta Pi Engineering Honor Society; Eta Kappa Nu/IEEE's Award for Outstanding Senior in Electrical Engineering; Ohio Aerospace Institute Fellowship; Centerior Energy Fellowship; General Motors Scholarship; Case Alumni Association Scholarship; Dean's High Honors

Licenses and Certifications

Registered Professional Engineer, Illinois, #062-058837
Registered Professional Engineer, Michigan, #6201057824
Registered Professional Engineer, Missouri, #2010036256
Registered Professional Engineer, New York, #086510-1
Registered Professional Engineer, North Carolina, #037584
Registered Professional Engineer, Ohio, #E-65142
Registered Professional Engineer, Texas, #105276
Registered Professional Engineer, West Virginia, #19078
Registered Professional Engineer, District of Columbia, #PE906421
Certified Fire and Explosion Investigator (CFEI), #17603-9653

Patents and Patent Applications

Patent 6,789,002 B1: Determination of Vehicle Payload Condition, September 7, 2004 (with A. Hac).

Patent 6,804,594 B1: Active Steering for Handling/Stability Enhancement, October 12, 2004 (with T. Brown, A. Chandy, H. Chen, and C. Gryczan).

Patent 6,862,506 B2: Method for Automatically Adjusting Reference Models in Vehicle Stability Enhancement (VSE) Systems, March 1, 2005 (with E. Bedner, K. Boswell, H. Chen, and B. McDonald).

Patent 6,879,896 B2: System and Method for Using Vehicle Operator Intent to Adjust Vehicle Control System Response, April 12, 2005.

Patent 6,926,114 B2, Assist Modification in Active Front Steering, August 9, 2005 (with F. Bolourchi, K. Boswell, J. Dickinson, and E. Bedner).

Patent 6,942,057 B2: Feel Control for Active Steering, September 13, 2005 (with K. Boswell and F. Bolourchi).



Patent 7,083,025 B2: Method for Implementing Vehicle Stability Enhancement Reference Models for Active Steer Systems, August 1, 2006 (with E. Bedner and K. Boswell).

Patent 7,213,675 B2: Method and System for Anti-Static Steering for Vehicle Steering Systems, May 8, 2007 (with C. Gryczan).

European Patent EP 1357013B1: System and Method for Using Vehicle Operator Intent to Adjust Vehicle Control System Response, June 6, 2007.

European Patent Application 02078139.9: Method for Automatically Adjusting Reference Models in Vehicle Stability Enhancement Systems.

European Patent Application 02079498.8: Feel Control for Active Steering.

Publications and Presentations

Arora A, Martens J. Energy storage for BEV's: An engineering perspective. IEEE Transportation Electrification Conference and Expo (ITEC' 13), Dearborn, MI, June 16–19, 2013. (Half-day tutorial).

Martens JD, Arora A. Understanding the role of software in product failures. IEEE Symposium on Product Compliance Engineering, Portland, OR, November 5–7, 2012.

Morrison DR, Fecke M, Martens, JD. Migrating an incident reporting system to a CCPS process safety metrics model. Journal of Loss Prevention in the Process Industries 2011, in press.

Martens JD, Fecke, M, Ogle, RA, Bishop, JA. Functional testing for industrial control systems. Proceedings, ASME 2011 International Mechanical Engineering Congress & Exhibition IMECE2011, Denver, CO, November 11–17, 2011.

Arora A, Martens JD, Babic D. AC & DC adapters safety considerations. IEEE Symposium on Product Compliance Engineering, San Diego, CA, October 10–12, 2011.

Fecke M, Martens JD, Cowells J, Morrison DR. A guide to developing and implementing safety checklists: Plant steam utilities. Process Safety Progress 2011; 30(3):240–250.

Ramırez JC, Fecke M, Morrison DR, Martens JD. Root cause analysis of an industrial boiler explosion (and how hazard analysis could have prevented it). Proceedings, ASME 2010 International Mechanical Engineering Congress & Exhibition IMECE2010, Vancouver, Canada, November 12–18, 2010.

Morrison DR, Fecke M, Martens JD. Migrating an organizational incident reporting system to a CCPS process safety metrics model. 2010 Annual Symposium, Mary Kay O'Connor Process Safety Center, Texas A&M University, College Station, TX, October 26, 2010.

Fecke M, Morrison DR, Martens JD, Cowells JT. A guide to developing and implementing safety checklists: Plant steam utilities. American Institute of Chemical Engineers, 2010 Spring National Meeting, 25th Center for Chemical Process Safety International Conference, San Antonio, TX, March 22–24, 2010.

Morrison DR, Martens JD, Ogle RA, Cowells JT. Root cause analysis of a cryogenic refrigeration system explosion. American Institute of Chemical Engineers, 2009 Spring National Meeting, 43rd Annual Loss Prevention Symposium, Tampa, FL, April 26–30, 2009.

Morrison DR, Martens JD, Ogle RA, Cowells JT. Accident investigation using process control event diagrams. American Institute of Chemical Engineers, 2009 Spring National Meeting, 24th Annual CCPS International Conference, Tampa, FL, April 26–30, 2009.

Martens JD, Johnson G, So P. Design considerations for consumer products utilizing high voltage. Presentation, 2006 IEEE Symposium on Product Safety and Compliance Engineering, IEEE Product Safety Engineering Society, (PSES), Irvine, CA, October 23–24, 2006. Also approved for publication in the IEEE PSES 2006 Conference Proceedings.

Martens JD, Hac A, Brown T. Detection of vehicle rollover. 2004 SAE World Congress, No. 04-Annual-848, Detroit, MI, March 2004 (Book SP-1869, paper number 2004-01-1757).

Martens JD. Lyapunov-based, on-line identification for backstepping control. Department of Electrical Engineering and Computer Science, Ph.D. Dissertation, Cleveland, OH, Case Western Reserve University, 2000.

Martens JD, Newman WS. Stabilization of a mobile robot climbing stairs. 1994 IEEE Proceedings and IEEE Video Proceedings of the International Conference on Robotics and Automation, San Diego, CA, p. 2501–2507, May 1994.

Martens JD. Enhanced teleoperation of a mobile robot. CAISR Technical Report #93-111, Master's Thesis, Case Western Reserve University, 1993.

Doctoral Thesis

Martens JD. Lyapunov-based, on-line identification for backstepping control. Case Western Reserve University, Cleveland, OH, 2000.

Project Experience

- Automatic racquetball serving machine with adjustable rate and pitch control
- Computer-controlled answering machine with remote interface
- Microprocessor-based stepper motor controller with power electronics
- Microprocessor-based robotic paint nozzle modulation controller
- ISA-based Analog-to-Digital, Digital-to-Analog, and Digital Input/Output data acquisition and control board

- Analog and digital interface circuitry for personal computer including full optical isolation
- PWM-based, feedback velocity controller for radio controller car
- Interface circuitry for radio control car to VME-based multiprocessor system
- Radio control transmitter/receiver link w/ DTMF (Dual-Tone Multi-Frequency) transmission
- Sonar sensor control and VME interface circuitry
- Sound transmission using modulated LED output
- Custom LED-based encoder for mobile robot actuators
- Power electronics and electromechanical device interfaces to control audio equipment using personal computer
- Fan clutch speed monitoring circuitry
- Functional test stand for automotive Height Control Module (11 channel configurable tester)
- Portable VME-based multiprocessor system and power electronics for autonomous mobile robot
- Mobile robot control interface circuitry
- Power amplifier and electronics for 16-channel, computer-controller nichrome heater system
- Espresso maker temperature regulation circuitry with feedback
- Waterbed temperature regulation circuitry with feedback
- Dspace isolation and interface circuitry for automotive instrumentation
- Active, multi-band equalizer for car audio system
- Wiper delay circuitry for automobile
- Radar detection circuitry for automotive applications
- Battery charging circuitry for NiCad rechargeable batteries
- Keypad encoder and decoder circuitry
- FM (wireless) audio transmitter / receiver modules
- Custom, multi-frequency sine-wave generator and special timing circuitry for MTS test equipment interface
- Real-Time Damping module performance test stand

Professional Affiliations

- The Institute of Electrical and Electronic Engineers—IEEE (senior member)
- The International Society of Automation—ISA (member)
- The American Society of Mechanical Engineers—ASME (member)
- National Association of Fire Investigators—NAFI (member)

